

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 30-35, 38-41 and 43-47 are rejected under 35 U.S.C. 103(a) as being obvious over Gruteser et al. (6,870,477) in view of Cooper (4,779,922). With respect to claim 30, Gruteser et al. discloses a member (100) selected from the group of member consisting of a chair member, a bed member and a lounge member, said member having moving parts (unlabeled), in the form of a seat or back that is deformable (column 6, line 20), and a physical movement controller (240) for said moving parts which outputs information from said member concerning directions for the operation of said controller for the moving parts including information output circuitry (130) and an energy converter, either in the form of "solar cells" (column 5, line 17) or wheels (105) "used to generate electricity" (column 5, line 29) which converts energy to which the member is exposed (i.e. solar energy or kinetic energy) to electrical energy for powering said information output circuitry wherein said information output circuitry outputs information to an occupant of the member, given that the physical movement controller (240) may include a PC having "a user interface including input devices and displays which may be used **by the occupant of the chair** to make manual adjustments to environmental parameters and which may also convey information **to the occupant**

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about the status or results of information carrying signals sent from or received by the chair systems” (column 6, lines 7-12), regarding directions for the operation of the controller for the moving parts without producing movement of the parts.

With respect to claim 31, said energy converter comprises a solar panel (column 5, line 17) on an exposed surface of said member.

With respect to claim 32, said information output circuitry (130) is further linked to a biorhythm sensor (column 3, lines 21-27) (110).

With respect to claim 33, a digital display, in the form of a PC with an input device and display (column 6, lines 4-7) also powered by said one or more energy converts (given that the digital display is part of the chair systems (215)) and displaying information from said biorhythm sensor.

With respect to claim 34, said member (100) comprises a chair and said energy converter converts motion of a moveable portion of the chair (i.e. forward and backward motion of the chair back (column 5, lines 23-25) or rotational motion of the wheels (105)) to electrical energy.

With respect to claims 35 and 46-47, Gruteser discloses a member (100) selected from the group of members consisting of a chair member, a bed member and a lounge member, said member (100) including an information output device (130)(140)(145)(240) which outputs information from said member, an energy converter which converts energy to which the member is exposed to electrical energy for powering said information output device (130)(140)(145)(240), wherein said information output device (130)(140)(145)(240) comprises a physical movement control (240) for a

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moveable part (i.e. a vibrator (column 6, line 23)) of said member, said physical movement control (240) outputting information to an occupant of the member, in the form of a signal, regarding function of said control without producing movements of the chair (column 6, lines 7-12). The effectors (210) actually produce movement of the chair.

A visual display, in the form of a PC, is also powered by said energy converter, said visual display displaying the directions for use of the control (240).

With respect to claim 38, an electrical rechargeable power pack (212) is charged by said energy converter, said power pack storing the electrical energy and dispersing the electrical energy required.

With respect to claim 39, said member (100) comprises a chair having rolling casters (105) for generating said electrical energy.

With respect to claim 40, said member (100) comprises a chair and said chair has a back and a seat and a moveable hinge between said back and seat for generating said electrical energy (column 5, lines 20-23).

With respect to claim 41, an electrically operated body repositioning means, in the form of a deforming seat or back of the chair (column 6, lines 20-21) is powered by said energy converter.

With respect to claim 43, Gruteser discloses a chair (100) having electrical power requirements, and a generator (in the form of solar cells or casters (105) carried by said chair for converting energy to which the chair is exposed to electrical energy for powering said electrical power requirements.

With respect to claim 44, a rechargeable battery (212) is carried by the chair, said generator recharges said battery (212), said battery powering said electrical power requirements of said chair.

With respect to claim 45, a chair (100) having electrical power requirements for displaying information to an occupant of the chair regarding the operation of a plurality of controls for moving a plurality of parts respectively of the chair without producing movement of said parts comprising: an energy converter means (i.e. in the form of solar cells or rolling casters (105)) carried by said chair for: providing power to said controls to move the parts of the chair respectively and to display said information to the occupant regarding directions for the operation of the controls, without affecting movement of said parts, to inform the occupant to use the controls to move such parts of the chair respectively and providing power to said display for displaying information regarding the directions for operation of said controls without producing movements of said parts respectively. The devices, sensors, wireless communication devices all require electrical energy as recited in column 4, lines 55-58. The on board energy converters are used to provide this energy.

Gruteser discloses a PC as a control which has a user interface including input devices and displays which may be used by the occupant of the seat. While the PC must be located in proximity to the chair to be utilized by the seat occupant, it is not inherently mounted on the chair as claimed by applicant.

Cooper teaches a workstation system with a PC mounted directly on the seating unit.

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It would have been obvious to one of ordinary skill of the art at the time the instant invention was made to mount the PC or controls, as disclosed by Gruteser, on the chair as taught by Cooper. Such a modification would ensure that the control is within easy

3. Claims 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gruteser et al. (6,870,477) in view of Cooper (4,779,922) in further view of Sparks (6,204,767). As disclosed above, Gruteser disclosed all claimed elements except the provision of audio feedback from the control.

Sparks teaches the use of audio feedback, output from speaker element (10), triggered by control unit (34)(36)(38)(40).

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to incorporate a sound signaling system into the chair (100) disclosed by Gruteser. Such a modification would enable people located in the vicinity of the seat to become aware of a situation regarding the seat occupant.

4. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gruteser et al. (6,870,477) in view of Cooper (4,779,922) in further view of Burt (US 2002/0056709). As disclosed above, Gruteser reveals all claimed elements with the exception of said body-repositioning means comprising a lumbar adjustment member controlled by a timer.

Burt teaches the use of lumbar supports (20) that include heated electrically conductive elastomeric materials. The expansion and contraction of the lumbar

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elements are traditionally controlled by a timer (paragraph [0004]) and provide a vibrating motion.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to add lumbar support elements to the seat disclosed by Gruteser. Such a modification would ensure that seat occupants do not get fatigued backs while sitting in the seat.

Response to Amendment/Arguments

5. Applicant's amendments and arguments filed on 19 November 2010 have been fully considered. Specifically, Applicant argues that the applied prior art neither singly nor combined disclose physical movement controls. The Examiner contends that element (240) constitutes a physical movement control. Element (240) controls effectors, including a vibrator (column 6, line 23). The vibrator is an effector which exhibits physical movement (i.e vibration) and therefore control (240) is a physical movement control.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARAH B. MCPARTLIN whose telephone number is (571)272-6854. The examiner can normally be reached on M-Th 7:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Dunn can be reached on 571-272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sarah B. McPartlin/

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